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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: **3BM-KUG0308**
(Formerly NWB5KUG0308)

August 20, 2007

Mr. Paul Waye, SAO
Hamlet of Kugluktuk
PO Box 271,
Kugluktuk, NU X0B 0E0
Email: saokug@qiniq.com

RE: AMENDMENT #1 TO NWB LICENCE No. 3BM-KUG0308

Dear Mr. Waye:

Please find attached Amendment #1 to Licence No. **3BM-KUG0308**, issued to the Hamlet of Kugluktuk by the Nunavut Water Board (**Motion #: 2007-08-09**) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*. The terms and conditions of the attached Licence related to water use and waste disposal are an integral part of this approval.

If the Licensee contemplates the renewal of this Licence, it is the responsibility of the Licensee to apply to the NWB for its renewal. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. Note that if the Licence expires before the NWB issues a new one, then water use and waste disposal must cease, or the Licensee will be in contravention of the Nunavut Land Claims Agreement. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The NWB recommends that an application for the renewal of this Licence be filed at least three months prior to the Licence expiry date.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, in the public interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the Amendment. However, a minimum of 30 days is required from time of acceptance by the NWB. It is the responsibility

of the Licensee to ensure that all application materials have been received and acknowledged by the Manager of Licensing.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Kabloona', with a long horizontal stroke extending to the right.

Thomas Kabloona
A/Chief Executive Officer

DF/ajw/pb

Enclosure: Amendment #1 to Licence No. **3BM-KUG0308**

Cc: Jim Rogers, INAC
Peter Kusugak, INAC
Andrew Keim, INAC
Colette Spagnuolo, INAC
Erin Calder, NWMB
Carson Gillis, NTI
Kevin Tweedle, KIA
Paul Savoie, DFO
Cindy Parker, EC
Earle Baddaloo, GN-DOE
John Dawe, GN
Leslie Payette, NIRB



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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

DECISION

AMENDMENT #1 TO LICENCE NUMBER: 3BM-KUG0308

This is the decision of the Nunavut Water Board (NWB) with respect to an Application for Amendment dated August 29th, 2006 made by the:

HAMLET OF KUGLUKTUK

to allow for the rehabilitation of, and upgrades to, the Sewage Disposal Facilities and Solid Waste Disposal Facilities currently utilized by the Hamlet of Kugluktuk, in a manner described by the Applicant in the Application for Licence Amendment filed with the NWB.

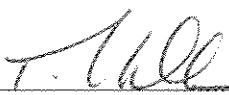
DECISION

After having been satisfied that the application was exempt from the requirement for screening by the Nunavut Impact Review Board in accordance with Schedule 12.1, Paragraph 5 of the *Nunavut Land Claim Agreement* (NLCA), the NWB decided that the application could proceed through the regulatory process. In accordance with S.55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWSRTA) and Article 13 of the NLCA, public notice of the application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and written representations made by interested persons, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the NLCA and of the NWSRTA, decided to waive the requirement to hold a public hearing and determined that:

Amendment # 1 to Licence Number 3BM-KUG0308 be issued subject to the terms and conditions contained therein. (Motion #: 2007-08-09). All remaining terms and conditions of Licence 3BM-KUG0308 remain in force.

SIGNED this 12th day of August, 2007 at Gjoa Haven, NU.



Thomas Kabloona
A/Chief Executive Officer

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I. PROCEDURAL HISTORY

On August 29th, 2006, an Application to Amend the Hamlet's current water licence was filed with the NWB, for the purpose of upgrading the Sewage Disposal Facilities and Solid Waste Disposal Facilities utilized by the Hamlet of Kugluktuk, which is located immediately west of the mouth of the Coppermine River on the Coronation Gulf at 67°50'N, 115°15'W.

The Licence issued on November 20th, 2003 shall be amended to include the following terms and conditions, to allow the Hamlet of Kugluktuk to undertake rehabilitation of, and upgrades to, the Sewage Disposal Facilities and Solid Waste Disposal Facilities currently utilized by the Hamlet of Kugluktuk, in a manner described by the Applicant in the Application for Licence Amendment filed with the NWB on August 29th, 2006.

II INTERVENOR COOMENTS

Recommendations relevant to wastewater treatment and solid waste disposal operations in the Hamlet were provided by INAC, Department of Environment (GN) and Environment Canada. The Intervenor provided specific comments concerning the operation and maintenance, monitoring and construction of the Sewage Disposal Facilities and Solid Waste Disposal Facilities. Environment Canada noted the Hamlet must ensure that any effluent discharge must be in compliance with Section 36(3) of the *Fisheries Act*, which states that the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited. INAC and Department of Environment (GN) provided specific guidance regarding the operation of the Solid Waste Disposal Facility and the Landfarm Facility. INAC, Department of Environment (GN) and Environment Canada all provided the NWB with specific recommendations regarding facility monitoring and effluent discharge criteria.

The Board concurs with these recommendations, which are reflected in the terms and conditions of the Water Licence.

AMENDMENT #1 TO LICENCE 3BM-KUG0308

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

HAMLET OF KUGLUKTUK

(Licensee)

of

KUGLUKTUK, NUNAVUT, X0E 0E0

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water for a period subject to restrictions and conditions contained within this Amendment #1 to Licence:

3BM-KUG0308

Licence Number

NUNAVUT 07

Water Management Area

KUGLUKTUK, NUNAVUT

Location

WATER USE AND WASTE DISPOSAL

Purpose

MUNICIPAL UNDERTAKINGS

Description

64,000 CUBIC METRES ANNUALLY

Quantity of Water Not to be Exceeded

NOVEMBER 20, 2003

Date of Licence

NOVEMBER 30, 2008

Expiry Date of Licence

Dated this 12th of August 2007 at Gjoa Haven, NU.



Thomas Kabloona
A/Chief Executive Officer

AMENDMENT # 1 TO LICENCE 3BM-KUG0308

Effective Date August 12, 2007

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

- Amend Item 1** **“Sewage Disposal Facility”** comprises the area and engineered structures designed to contain and treat sewage, as described in the Application for Amendment to a Water Licence filed by the Applicant on July 14, 2007 and illustrated in the Drawings entitled “Hamlet of Kugluktuk Proposed Sewage Lagoon Plan DWGS 1-5 (GN Project # 04-4405/15 September 2006);
- Amend Item 2** **“Solid Waste Disposal Facility”** comprises the area and associated structures designed to contain solid waste and to permanently isolate the contents of the disposal facility from the environment, as described in the Application for Amendment to a Water Licence filed by the Applicant on August 29th, 2006 and illustrated in the Drawing entitled “Hamlet of Kugluktuk Solid Waste Disposal Facility Improvements DWG 1 (GN Project # 04-4405/15 September 2006);
- Amend Item 3:** **“Waste Disposal Facilities”** means all facilities designated for the disposal of waste, and includes the Sewage Disposal Facilities, Solid Waste Disposal Facilities, and Landfarm Facility, as described in the Application for Amendment to a Water Licence filed by the Applicant on August 29th, 2006;
- Insert Item 1:** **“Landfarm Facility”** means an area designed to biologically treat petroleum hydrocarbon-impacted soils, as described in the Application for Amendment to a Water Licence filed by the Applicant on August 29th, 2006 and illustrated in the Drawing entitled “Hamlet of Kugluktuk Solid Waste Disposal Facility Improvements DWG 1 (GN Project #04-4405/15 September 2006).
- Insert Item 2** **“Petroleum Hydrocarbon-Impacted Soil”** means soil in which the primary petroleum product present, as determined by laboratory analysis, consists of fuel oil and/or diesel fuel and /or gasoline

PART B: GENERAL CONDITIONS

- Insert Item 10** The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.

Insert Item 11 This Licence is not assignable except as provided in Section 44 of the *Act*.

PART C: CONDITIONS APPLYING TO WATER USE

Amend Item 4: The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.

Insert Item 7 The Licensee shall not remove any material from below the ordinary high water mark of any water body unless authorized.

Insert Item 8 The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.

Insert Item 9 Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into water.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

Insert Item 10: In accordance with the requirements outlined in S. 36(3) of the *Fisheries Act* and S.73 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, the Licensee shall ensure that at KUG-5 effluent from the Sewage Disposal Facilities shall be non-acutely-lethal to fish (as determined by the Environment Canada Reference Method for Determining the Acute Lethality of Effluent to Rainbow Trout - EPS 1/RM/13 2nd Edition Dec 2000).

Insert Item 11 The Licensee shall direct hydrocarbon-impacted soil to the Landfarm Facility, which shall be constructed and operated in such a manner as described in the Application for Amendment to a Water Licence filed by the Applicant on August 29th, 2006.

Insert Item 12 The Licensee shall test any contact water to be discharged from the Landfarm Facility, prior to discharge. Any liquid effluent shall be non-acutely-lethal to fish (as determined by the Environment Canada Reference Method for Determining the Acute Lethality of Effluent to Rainbow Trout - EPS 1/RM/13 2nd Edition Dec 2000), and shall meet the following wastewater discharge criteria prior to being released to water:

Parameter	Maximum Allowable Concentration (µg/L)
pH	6 to 9
Oil and Grease	5000
Arsenic (total)	100
Cadmium (dissolved)	10
Chromium (dissolved)	100
Cobalt (dissolved)	50
Copper (dissolved)	200
Lead (dissolved)	50
Mercury (total)	0.6
Nickel (dissolved)	200
PCB (total)	1000
Phenols	20
Zinc (total)	500

PART F: CONDITIONS APPLYING TO OPERATIONS AND MAINTENANCE

- Delete Item 2** The Licensee shall implement the Plan specified in Part F, Item 1 as and when approved by the Board.
- Delete Item 3** The Licensee shall revise the Plan referred to in Part F, Item 1, if not acceptable to the Board. The revised Plan shall be submitted to the Board for approval within thirty (30) days of notification of the Board decision.
- Delete Item 5** In the absence of a contingency plan contained within an approved Operation and Maintenance Plan, and should during the period of this Licence an unauthorized discharge of waste occur, or if such a discharge is foreseeable, the Licensee shall:
- i. take whatever steps are immediately practicable to protect human life, health and the environment;
 - ii. without delay seek guidance from the Departments of Community Government and Transportation and Sustainable Development with regards to mitigation and remedial actions required to address the discharge;
 - iii. report the incident immediately *via* the 24-Hour Spill Reporting Line at (867) 920-8130 and to an Inspector; and
 - iv. submit to an Inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.

- Amend Item 1:** The Licensee shall implement the Approved Solid Waste Operations and Maintenance (O&M) Plan, Hamlet of Kugluktuk (2006).
- Amend Item 4:** If, during the period of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
- i. employ the Approved Environmental Emergency Contingency Plan (2006), as provided for in the Operation Maintenance Plan;
- Insert Item 5:** The Licensee shall implement the Approved Sewage Lagoon Operations and Maintenance (O&M) Plan, Hamlet of Kugluktuk (2006).

PART H: CONDITIONS APPLYING TO THE MONITORING PROGRAM

- Amend Item 1:** The Licensee shall maintain Monitoring Stations at the following locations:

<u>Monitoring Station</u>	<u>Description</u>
KUG-1	Raw water supply at Coppermine River prior to treatment
KUG-2	Effluent discharge from the Final Discharge Point of the Solid Waste Disposal Facilities
KUG-3	Raw Sewage at truck offload point
KUG-4	Point of effluent discharge from the Sewage Disposal Lagoon onto the Wetland Treatment Area
KUG-5	Effluent discharge for the Final Discharge Point of the Wetland Treatment Area, immediately prior to discharge to the marine receiving water.

Amend Item 2

The Licensee shall sample monthly at Monitoring Station KUG-2, KUG-4 and KUG-5 during the months of May to August, inclusive. Samples shall be analyzed for the following parameters:

BOD	Faecal Coliforms
pH	Conductivity
Total Suspended Solids	Ammonia Nitrogen
Nitrate-Nitrite	Oil and Grease
Total Phenols	Sulphate
Sodium	Potassium
Magnesium	Calcium
Total Arsenic	Total Cadmium
Total Copper	Total Chromium
Total Iron	Total Lead
Total Mercury	Total Nickel
Total Zinc	